

Software engineer with more than 20 years of experience in integration, backend, and systems development. I combine technical depth with responsibility for teams, client onboarding, and production systems. I build open-source games, GPU software, and developer tools in V.

PROFILE

- Development from native interfaces and code generators through to tested GPU applications.
- Leadership of a six-person team in an international, English-speaking environment.
- Experience with production operations, client integration, troubleshooting, mentoring, and technical documentation.

PROFESSIONAL EXPERIENCE

Open-Source Software Engineering

2021–present

Independent project work

- Developing Torus Trooper, a Vulkan arcade game with replays and customizable controls, alongside a hardware-accelerated H.264/MP4 player.
- Maintaining generated Vulkan and OpenCL bindings, typed helpers, memory allocators, and a V development environment for Kakoune.
- Reproducible builds, tests, and CI across compilers and platforms, with documented GPU-interoperability examples and technical learning guides.

Software Consultant

2018–2020

DATAGROUP · Berlin, Stuttgart, and Hamburg

- Planned and developed the backend of an Azure task-management application; coordinated two frontend engineers through stand-ups and Azure Boards.
- Built Android workflows for onboarding, inventory search, scanning, reordering, and transport status using Kotlin and SQLite.
- Maintained .NET systems and implemented XML-to-SEPA payment processing.

IT Operations Team Lead

2012–2017

travel audience · Bonn and Berlin

- Led a six-person team responsible for international advertiser integrations and import software across data formats and transport protocols.
- Owned technical client onboarding, campaign tooling, monitoring, and level-three support.
- Planned cross-team processes, delivered technical onboarding, and mentored an apprentice who graduated with a 95-percent result.

SELECTED PROJECTS

Torus Trooper

V · Vulkan · Windows and Linux

Free tunnel-racing arcade shooter inspired by Kenta Cho's original. Original spacecraft and courses, three difficulty modes, configurable keyboard and controller input, and a replay library with import and export. Public desktop packages, source code, and technical documentation.

v_vulkan_video

Vulkan Video · H.264 · MP4

Hardware-accelerated player with B-frame display ordering, profile checks, GPU selection, metadata rotation, timing, resize, and looping. The current Linux prerelease was checked against FFmpeg across 1,306 decoded frames; Windows hardware playback is not yet validated.

Khronos bindings and GPU interoperability

Vulkan · OpenCL 1.0–3.0

Reproducible registry generators, complete low-level APIs, and opt-in typed ownership helpers with ABI and compiler checks. A particle example connects OpenCL and Vulkan through shared GPU memory and semaphores, with a host-staged fallback.

vlang.kak

Kakoune · VLS · GDB

V development environment with language-server integration, navigation, diagnostics, testing, and local debugging. Managed installation and updates preserve personal settings; documented recovery complements the maintenance workflow.

Memory and UI building blocks for V

memory · vkmemalloc · GLFW · ImGui

Checked pools plus range, linear, ring, and buddy allocators; a V-native Vulkan allocator builds on them with block suballocation, memory budgets, and diagnostics. GLFW and Dear ImGui/ImPlot bindings support the applications.

PROFESSIONAL EXPERIENCE

Software Developer

2007–2012

Travel Products and travel audience · Bonn

Built travel and advertising products and data-driven interfaces using C#, ASP.NET, JavaScript, and SQL.

TECHNICAL CAPABILITIES

Systems	V, C, C++, Vulkan, Vulkan Video, OpenCL, H.264, MP4, GPU interop, C interoperability
Backend	C#, .NET, ASP.NET MVC, REST, SOAP, JavaScript, Kotlin
Data	MS SQL, PostgreSQL, MongoDB, Redis, SQLite; CSV, XML, JSON, YAML
Platform	Linux, Git, GitHub Actions, Jenkins CI/CD, Azure, AWS, CMake, Meson, debugging, and performance analysis
Leadership	Team leadership, technical planning, mentoring, client integration, documentation, level-three support

LANGUAGES

German, English, Russian

[Website](#) · [Project atlas](#) · [GitHub](#) · [Torus Trooper](#)

